



SN-3 SERIES

Sectional Directional Control Valves

FOR MOBILE AND INDUSTRIAL HYDRAULIC APPLICATIONS



Innovative Designs
Professional Quality
Customer Satisfaction !



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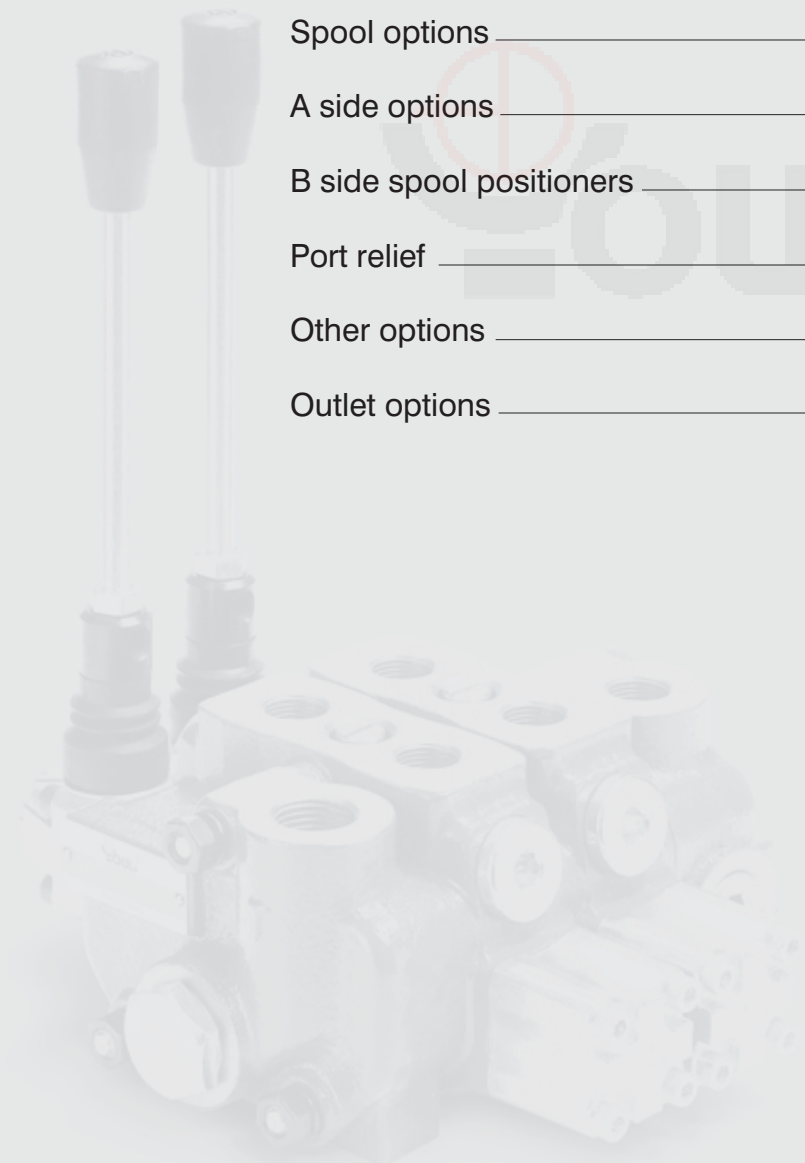


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SN-3 Chapters

Sectional Directional Control Valves

| | |
|--------------------------|------|
| Working condition | P.5 |
| Ordering code | P.7 |
| Dimensions | P.12 |
| Performance data | P.13 |
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For Mobile And Industrial Hydraulic Applications.

MONOBLOCK DIRECTIONAL CONTROL VALVES

MB-2 / MB-3 / MB-4 / MB-5 / MSB-5

SECTIONAL DIRECTIONAL CONTROL VALVES

SN-3 / SN-4 / SN-6 / SN-8



MB-2

ONLY ONE SECTION AVAILABLE

| | | |
|--|----------|-----------|
| Nominal flow rate | 45 l/min | 12 US gpm |
| Operating pressure (maximum) | 250 bar | 3600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



MB-3

AVAILABLE SECTIONS FROM 1 TO 7

| | | |
|--|----------|-----------|
| Nominal flow rate | 45 l/min | 12 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



MB-4

AVAILABLE SECTIONS FROM 1 TO 6

| | | |
|--|----------|-----------|
| Nominal flow rate | 60 l/min | 16 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



MB-5

AVAILABLE SECTIONS FROM 1 TO 6

| | | |
|--|----------|-----------|
| Nominal flow rate | 80 l/min | 21 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



MSB-5

AVAILABLE SECTIONS FROM 1 TO 6

With Independent load check valve in each section, and optional port relief.

| | | |
|--|----------|-----------|
| Nominal flow rate | 80 l/min | 21 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



SN-3

AVAILABLE SECTIONS FROM 1 TO 12

| | | |
|--|----------|-----------|
| Nominal flow rate | 50 l/min | 13 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



SN-4

AVAILABLE SECTIONS FROM 1 TO 12

| | | |
|--|----------|-----------|
| Nominal flow rate | 80 l/min | 21 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



SN-6

AVAILABLE SECTIONS FROM 1 TO 12

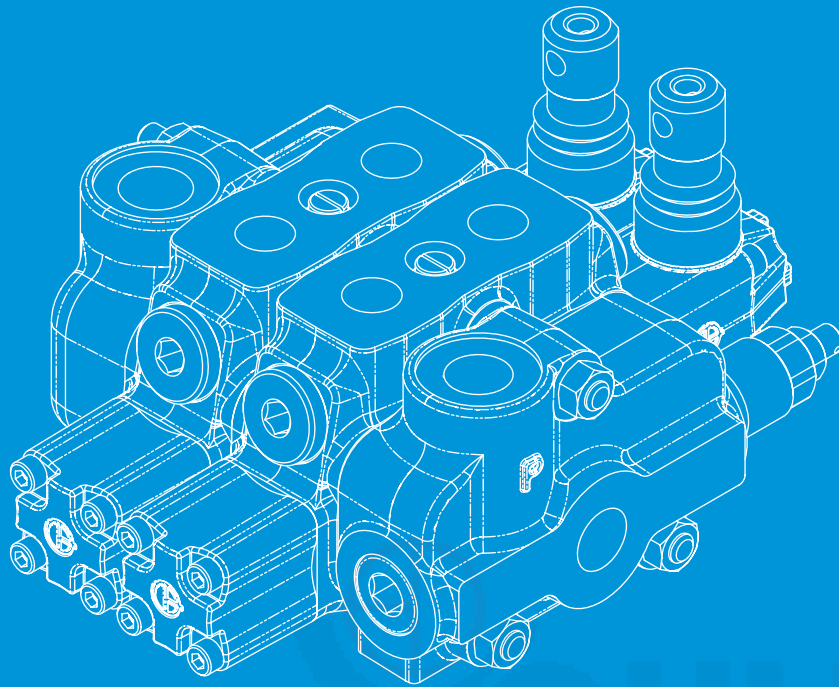
| | | |
|--|-----------|-----------|
| Nominal flow rate | 140 l/min | 37 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



SN-8

AVAILABLE SECTIONS FROM 1 TO 12

| | | |
|--|-----------|-----------|
| Nominal flow rate | 240 l/min | 63 US gpm |
| Operating pressure (maximum) | 315 bar | 4600 psi |
| Back pressure (maximum) on outlet port T | 25 bar | 360 psi |



Innovative Designs
Professional Quality
Customer Satisfaction !

AVAILABLE SECTIONS FROM

1 TO 12

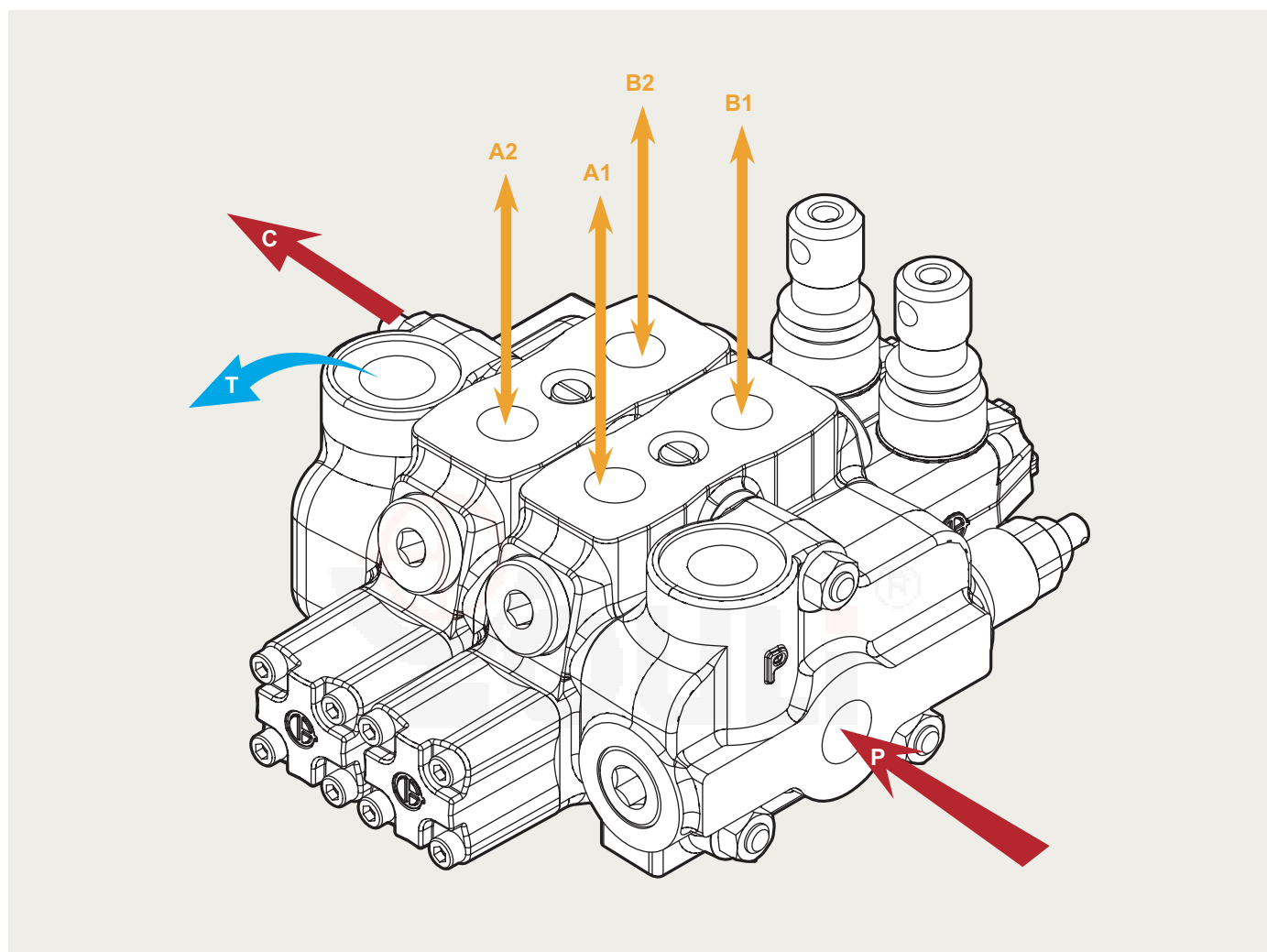
SN-3

Sectional Directional Control Valves



SN-3

Sectional Directional Control Valves



SN-3 Specifications

| Nominal flow rate | | 50 l/min | 13 US gpm |
|------------------------------|------------------------|----------------------------------|----------------------|
| Operating pressure (maximum) | | 315 bar | 4600 psi |
| Back pressure (maximum) | on outlet port T | 25 bar | 360 psi |
| Fluid temperature range | with NBR(BUNA-N) seals | from - 20° to 80°C | from - 4° to 176° F |
| | with FPM(VITON) seal | from - 20° to 100°C | from - 4° to 212° F |
| Viscosity | operating range | from 15 to 75 mm ² /s | from 15 to 75 cst |
| | min. | 12 mm ² /s | 12 cst |
| | max. | 400 mm ² /s | 400 cst |
| Ambient temperature range | | from - 40° to 60°C | from - 40° to 140° F |

• All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.

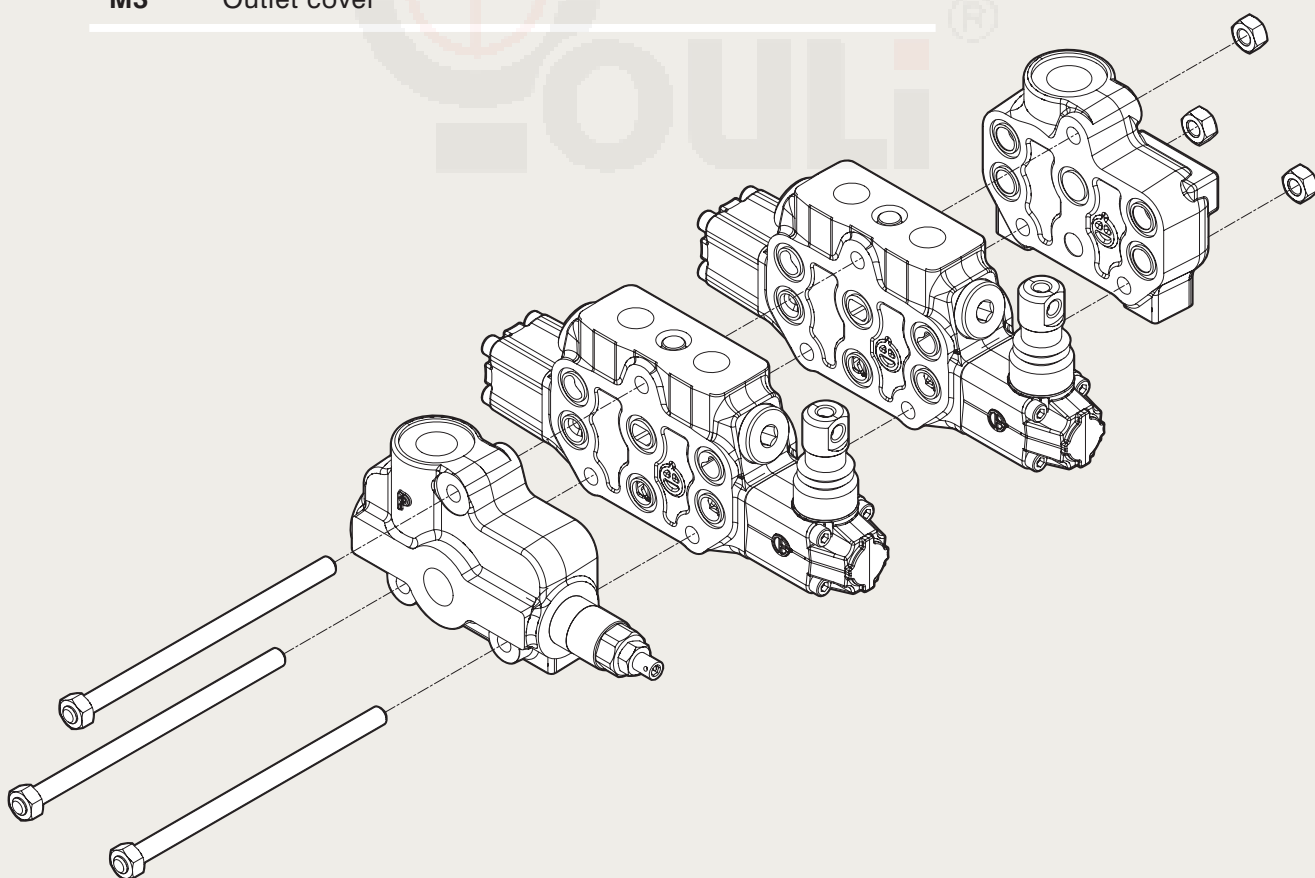
SN-3 Complete

Sectional Directional Control Valves

HOW TO ORDER FOR A COMPLETE ASSEMBLED VALVE

SN-3 / 2S - 3 / 18L / 28L / G-3-4 / M3

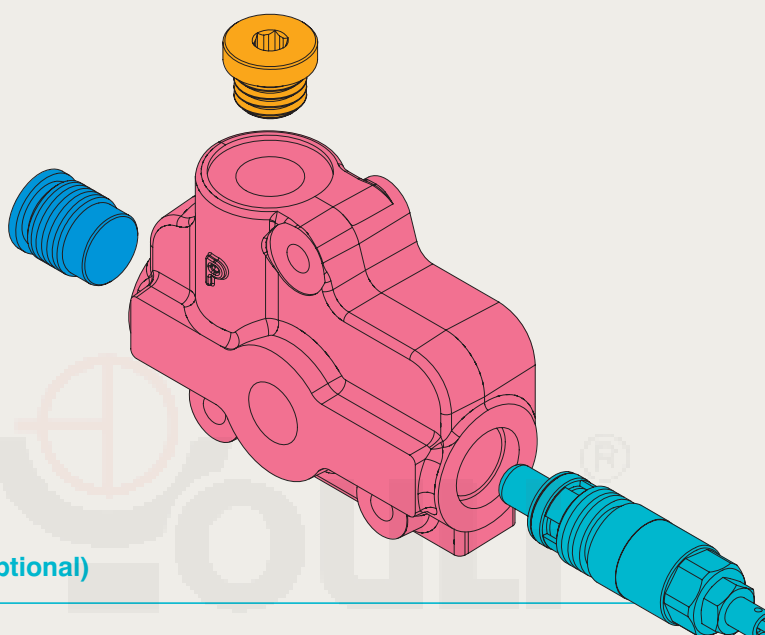
| | |
|--------------|---|
| 2S | No. of working section |
| 3 | Inlet cover with a main pressure relief valve |
| 18L | 1st section (complete working section) |
| 28L | Following section (complete working section) |
| G-3-4 | BSP ports |
| M3 | Outlet cover |



SN-3 Inlet Section

Sectional Directional Control Valves

FP SN-3 / YG-3 / G3



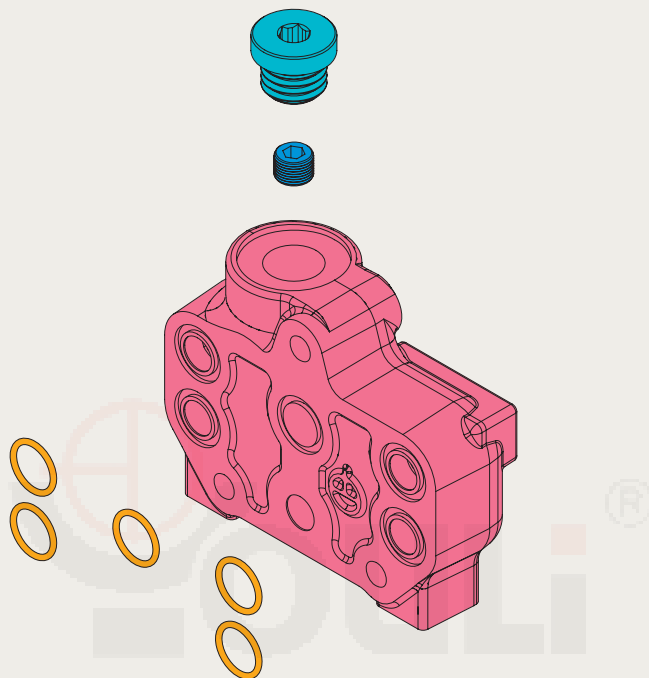
Inlet relief (optional)

| Inlet Relief (optional) | | | |
|-------------------------|------------|---|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| YG-2 | YLPSN33002 | Range 40 to 80 bar / 1150 to 2300 psi , standard setting 80 bar / 1150 psi | P. 14 |
| YG-3 | YLPSN33003 | Range 63 to 200 bar / 1800 to 3600 psi , standard setting 120 bar / 1750 psi | P. 14 |
| YG-4 | YLPSN33004 | Range 160 to 315 bar / 2900 to 4600 psi , standard setting 220 bar / 3200 psi | P. 14 |
| | | Standard setting is referred to 10 l/min - 2.6 US gpm flow. | P. 14 |
| SV | YLPSN34000 | Relief valve blanking plug | P. 14 |
| XYG | YLPSN33000 | Pilot operated pressure relief valve Range 25 to 315 bar/ 360 to 4600 psi, standard setting 125 bar/ 1800 psi | P. 14 |

SN-3 Outlet Section

Sectional Directional Control Valves

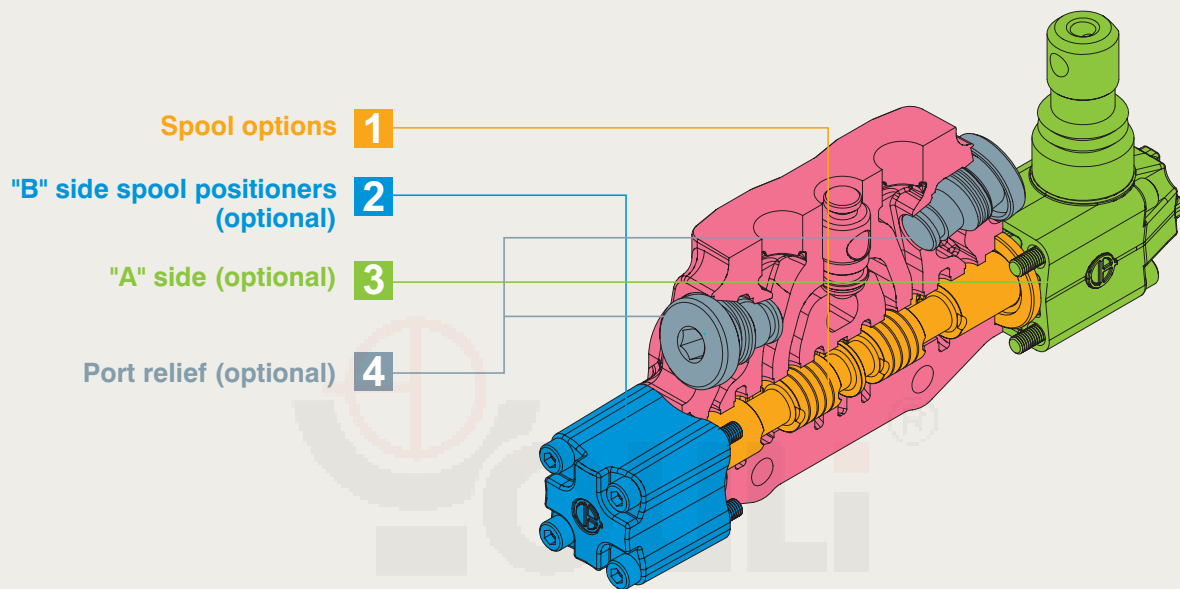
FT SN-3 / G-4 / M3



SN-3 Working Section

Sectional Directional Control Valves

EW SN-3 / 1S / **1** **8** **L** / **P1(G3-100)** / G-3
1 **2** **3** **4**



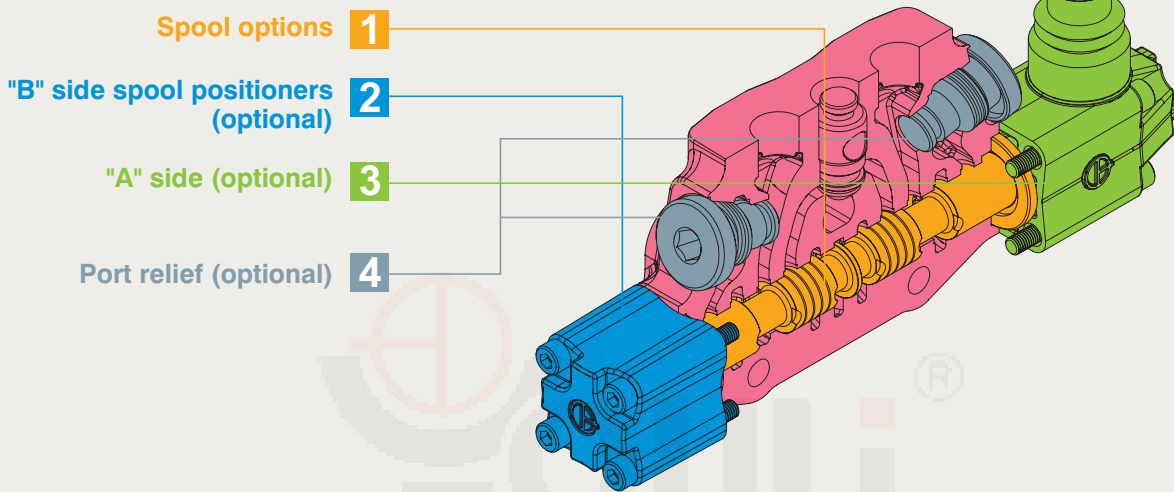
| 1: Spool Options | | | |
|------------------|------------|--|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| 1 | YLWSN32001 | Double acting,3 positions,with A and B closed in neutral position | P. 15 |
| 1S | YLWSN32010 | Double acting,3 positions,with A and B closed in neutral position, for series circuit | P. 18 |
| 2 | YLWSN32002 | Double acting,3 positions,with A and B open to tank in neutral position | P. 15 |
| 3 | YLWSN32003 | Single acting on A closed in neutral position, 3 positions, B plugged | P. 16 |
| 4 | YLWSN32004 | Single acting on B closed in neutral position, 3 positions, A plugged | P. 16 |
| 5 | YLWSN32005 | Double acting, 3 positions, with B open to Tank in neutral position | P. 17 |
| 6 | YLWSN32006 | Double acting, 3 positions, with A open to Tank in neutral position | P. 17 |
| 5PY | YLWSN33051 | Double acting, 4 positions, floating circuit in 4th position with A, B open to Tank by pushing the lever | P. 19 |
| 2H | YLWSN32020 | Double acting with A, B open partially to Tank in neutral | P. 18 |

SN-3 Working Section

Sectional Directional Control Valves

EW SN-3 / 1S / **1** **8** **L** / **P1(G3-100)** / **G-3**

1
2
3
4



| 2: B Side Spool Positioners | | | |
|-----------------------------|-------------|---|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| 6-1 | YLWSN33061 | Detent in pos. 1-0-2, without spring centered | P. 24 |
| 6-2 | YLWSN33062 | 2 positions, detent in pos. 0-2, without spring centered | P. 24 |
| 6-3 | YLWSN33063 | 2 positions, detent in pos. 1-0, without spring centered | P. 24 |
| 8D2 | YLWSN33082 | With spring return to neutral position and pin with M8 male thread for dual control | P. 24 |
| 8P | YLWSN33080 | ON/OFF Pneumatic actuator | P. 25 |
| 8EP3 | YLWSN34300 | ON/OFF Electro-Pneumatic actuator | P. 25 |
| 8MG1 (NO) | YLWSN34801 | Microswitch kit operated in pos. 1 (Normally Open) | P. 28 |
| 8MG2 (NO) | YLWSN34802 | Microswitch kit operated in pos. 2 (Normally Open) | P. 28 |
| 8MG3 (NO) | YLWSN34803 | Microswitch kit operated in pos. 1&2 (Normally Open) | P. 28 |
| MG (NO) | YLWSN34804 | Microswitch with NO terminal | P. 28 |
| 8MG1 (NC) | YLWSN348011 | Microswitch kit operated in pos. 1 (Normally Closed) | P. 28 |
| 8MG2 (NC) | YLWSN348021 | Microswitch kit operated in pos. 2 (Normally Closed) | P. 28 |
| 8MG3 (NC) | YLWSN348031 | Microswitch kit operated in pos. 1&2 (Normally Closed) | P. 28 |
| MG (NC) | YLWSN348041 | Microswitch with NC terminal | P. 28 |
| 8 | YLWSN33008 | With spring return to neutral position | P. 29 |
| 8-1 | YLWSN34081 | 2 positions, with spring centered from pos. 1 | P. 29 |
| 8-2 | YLWSN34082 | 2 positions, with spring centered from pos. 2 | P. 29 |
| 9-1 | YLWSN33091 | Detent in pos. 1, 2 with spring centered | P. 29 |
| 9-2 | YLWSN33092 | Detent in pos. 2 with spring centered | P. 29 |
| 9-3 | YLWSN33093 | Detent in pos. 1 with spring centered | P. 29 |

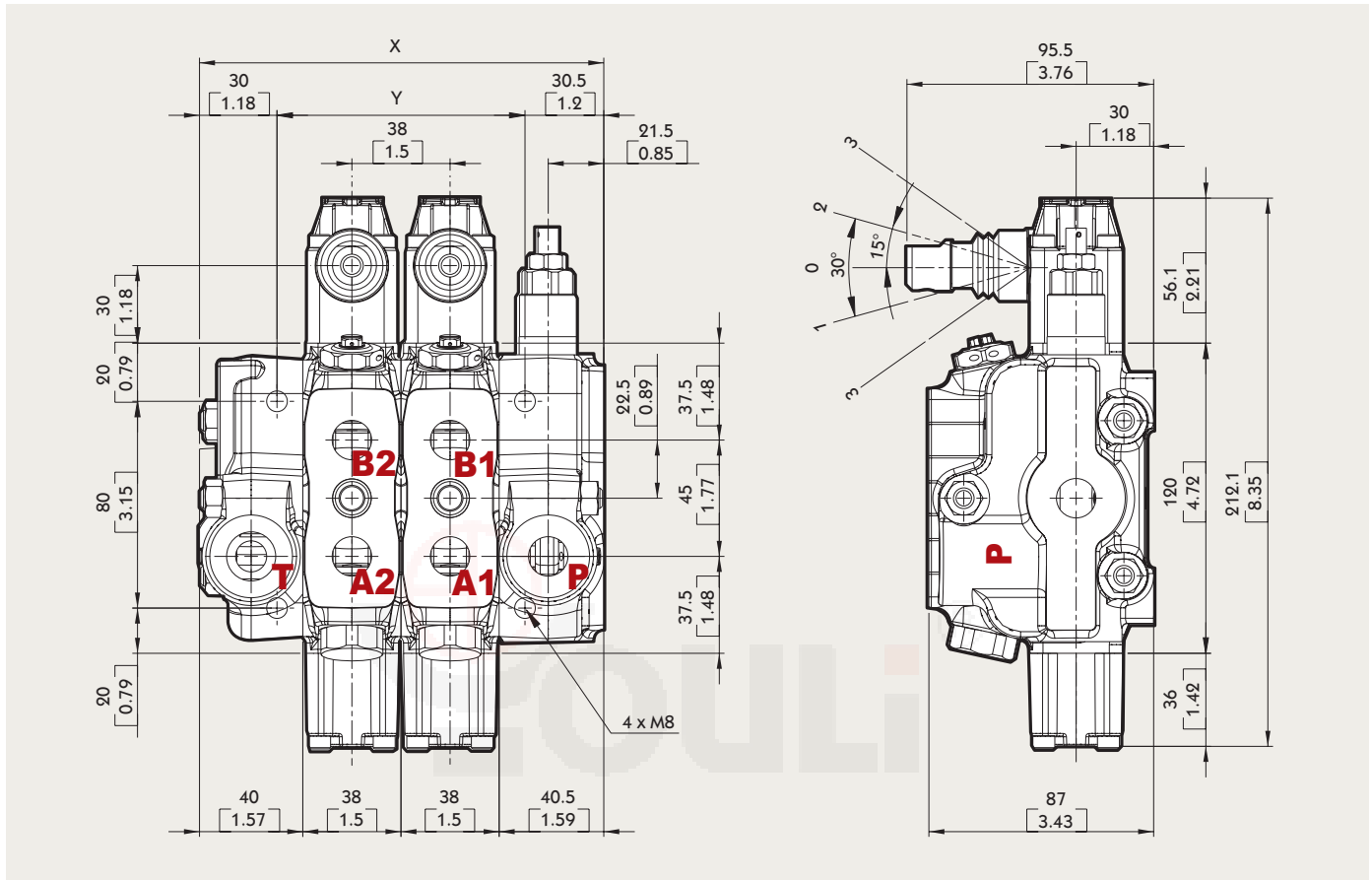
| 2: B Side Spool Positioners | | | |
|-----------------------------|------------|--|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| 8ED3+RV-KE1R3 | YLWSN34201 | 1S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE2R3 | YLWSN34202 | 2S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE3R3 | YLWSN34203 | 3S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE4R3 | YLWSN34204 | 4S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE5R3 | YLWSN34205 | 5S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE6R3 | YLWSN34206 | 6S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE7R3 | YLWSN34207 | 7S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE8R3 | YLWSN34208 | 8S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE9R3 | YLWSN34209 | 9S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE10R3 | YLWSN34210 | 10S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE11R3 | YLWSN34211 | 11S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ED3+RV-KE12R3 | YLWSN34212 | 12S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC) | P. 26 |
| 8ER3+KE1S0 | YLWSN33401 | 1S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE2S0 | YLWSN33402 | 2S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE3S0 | YLWSN33403 | 3S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE4S0 | YLWSN33404 | 4S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE5S0 | YLWSN33405 | 5S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE6S0 | YLWSN33406 | 6S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE7S0 | YLWSN33407 | 7S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE8S0 | YLWSN33408 | 8S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE9S0 | YLWSN33409 | 9S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE10S0 | YLWSN33410 | 10S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE11S0 | YLWSN33411 | 11S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |
| 8ER3+KE12S0 | YLWSN33412 | 12S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain | P. 27 |

| 3: A Side (Optional) | | | |
|----------------------|------------|--|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| L | YLWSN34000 | Standard lever | P. 20 |
| SLP | YLWSN34003 | Without lever, with dust proof plate | P. 20 |
| LCB | YLWSN34002 | Joystick lever for 2 section operation | P. 21 |
| TQ | YLWSN34004 | Flexible cable connection | P. 22 |

| 4: Port Relief (Optional) | | | |
|---------------------------|------------|--|-------|
| TYPE | CODE | DESCRIPTION | PAGE |
| P (G2-63) | YLWSN35002 | Anti-shock valve, range 63 to 125 bar / form 900 to 1800 psi standard setting 63 bar / 900 psi | P. 33 |
| P (G3-100) | YLWSN35003 | Anti-shock valve, range 100 to 250 bar / form 1450 to 3600 psi standard setting 100bar / 1450 psi | P. 33 |
| P (G4-200) | YLWSN35004 | Anti-shock valve, range 200 to 315 bar / form 2900 to 4600 psi standard setting 200 bar / 2900 psi | P. 33 |
| U (G2-63) | YLWSN35012 | Anti-shock valve and Anti-cavitation valve, range 63 to 125 bar / form 900 to 1800 psi standard setting 63 bar / 900 psi | P. 33 |
| U (G3-100) | YLWSN35013 | Anti-shock valve and Anti-cavitation valve, range 100 to 250 bar / form 1450 to 3600 psi standard setting 100 bar / 1450 psi | P. 33 |
| U (G4-200) | YLWSN35014 | Anti-shock valve and Anti-cavitation valve, range 200 to 315 bar / form 2900 to 4600 psi standard setting 200 bar / 2900 psi | P. 33 |
| C | YLWSN35100 | Anti - cavitation | P. 33 |

SN-3 Dimensions

Sectional Directional Control Valves



Standard threads

| Ports | BSP | UN-UNF | METRIC |
|---------|-------|-----------------|-----------|
| P | G 3/8 | 7/8-14 (SAE 10) | M18 x 1.5 |
| A and B | G 3/8 | 3/4-16 (SAE 8) | M18 x 1.5 |
| T and C | G 1/2 | 7/8-14 (SAE 10) | M22 x 1.5 |

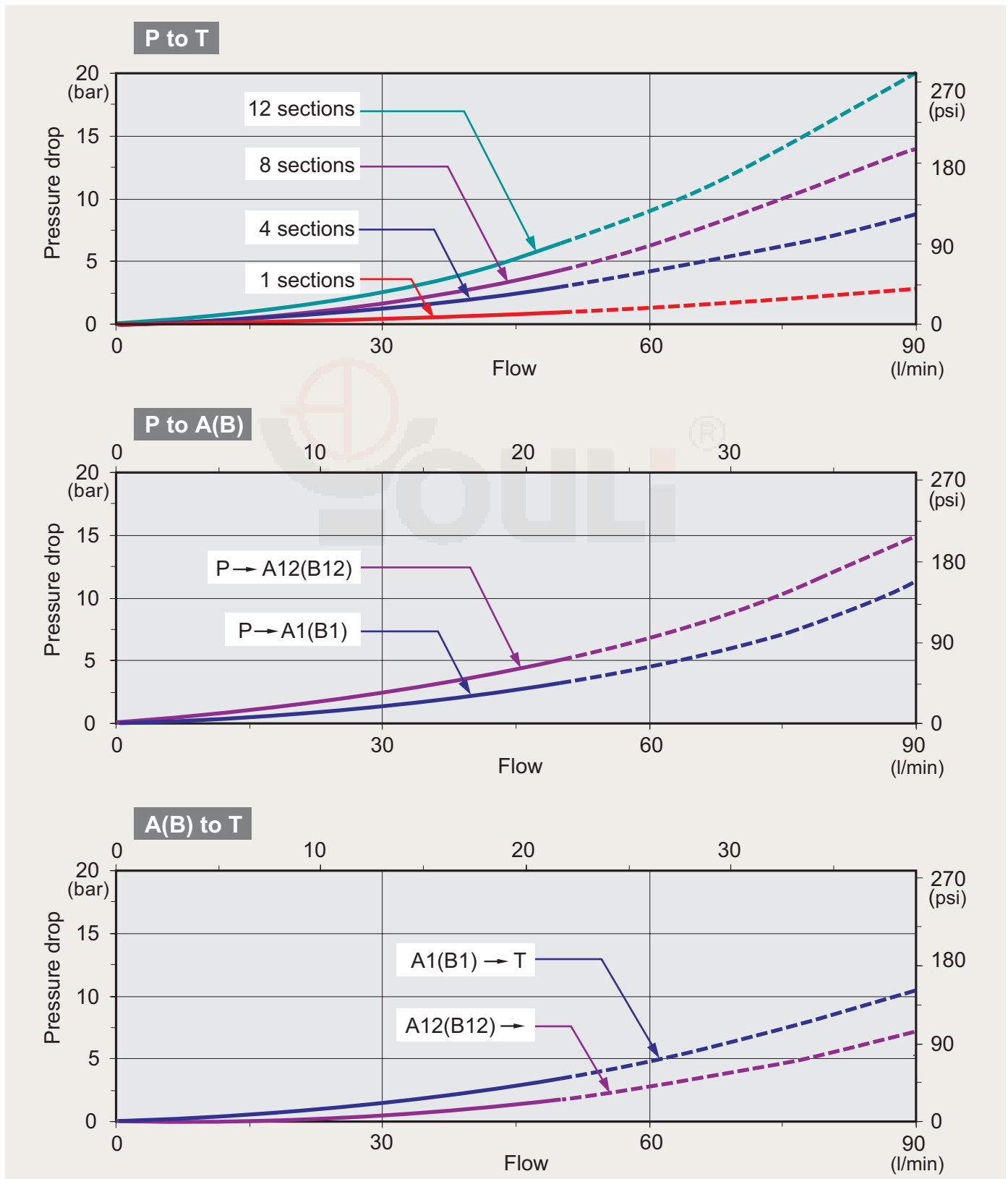
• G-3/8 : G3 G-1/2 : G4 G-3/4 : G6 G-1 : G8 G-1 1/4 : G10
 • SAE 8: E8 SAE 10: E10 SAE 12: E12 SAE 16: E16 SAE 20: E20

Standard dimensions

| TYPE | X | | Y | | TYPE | X | | Y | |
|---------|-------|-------|-----|------|----------|-------|-------|-----|-------|
| | mm | in | mm | in | | mm | in | mm | in |
| SN3 /1S | 118.5 | 4.66 | 58 | 2.28 | SN3 /7S | 346.5 | 13.65 | 286 | 11.26 |
| SN3 /2S | 156.5 | 6.16 | 96 | 3.78 | SN3 /8S | 384.5 | 15.15 | 324 | 12.76 |
| SN3 /3S | 194.5 | 7.66 | 134 | 5.28 | SN3 /9S | 422.5 | 16.65 | 362 | 14.26 |
| SN3 /4S | 232.5 | 9.15 | 172 | 6.77 | SN3 /10S | 460.5 | 18.15 | 400 | 15.76 |
| SN3 /5S | 270.5 | 10.65 | 210 | 8.27 | SN3 /11S | 498.5 | 19.65 | 438 | 17.26 |
| SN3 /6S | 308.5 | 12.15 | 248 | 9.76 | SN3 /12S | 536.5 | 21.15 | 476 | 18.76 |

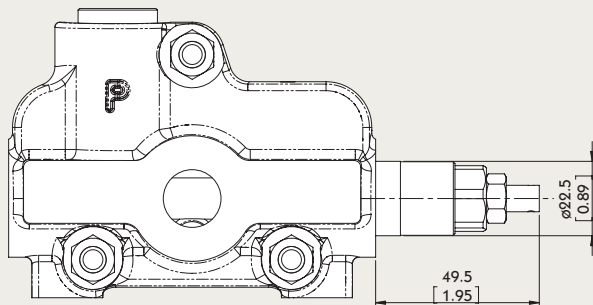
SN-3 Performance Curve Chart

Sectional Directional Control Valves

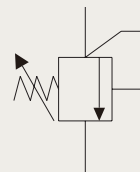


SN-3 Inlet Relief (Optional) Sectional Directional Control Valves

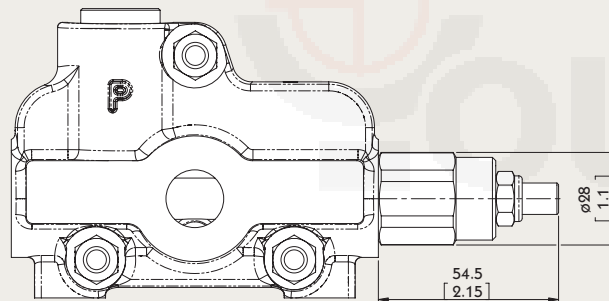
Type YG



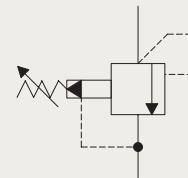
Direct pressure relief valve:



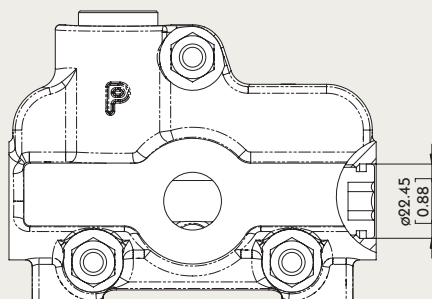
Type XYG



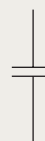
Pilot operated pressure relief valve:



Type SV



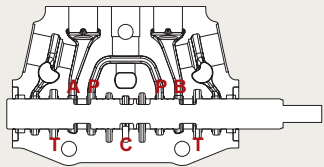
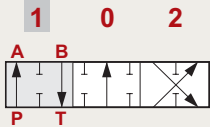
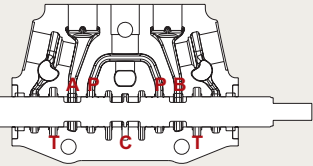
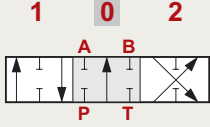
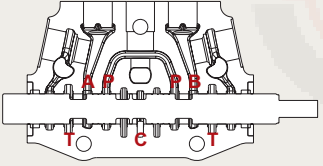
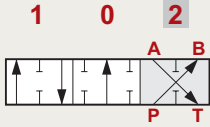
Relief valve blanking plug:



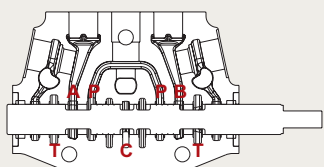
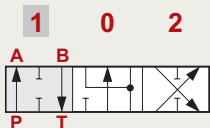
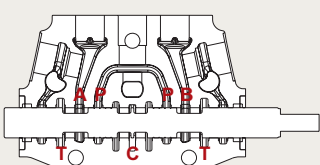
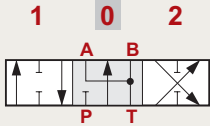
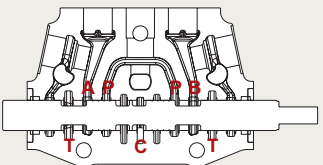
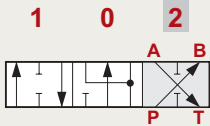
SN-3 spool Options

Sectional Directional Control Valves

TYPE 1

| | | |
|---|--|---|
|  | <p>P → A B → T C closed</p> |  |
|  | <p>P & T & A & B closed C open</p> |  |
|  | <p>P → B A → T C closed</p> |  |

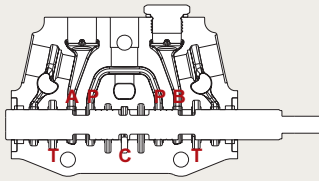
TYPE 2

| | | |
|---|--|---|
|  | <p>P → A B → T C closed</p> |  |
|  | <p>A & B → T P closed C open</p> |  |
|  | <p>P → B A → T C closed</p> |  |

SN-3 Spool Options

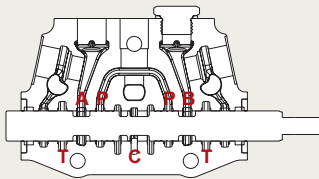
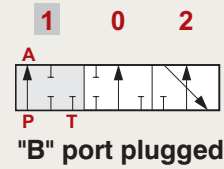
Sectional Directional Control Valves

TYPE 3



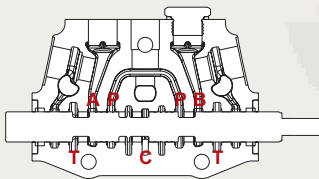
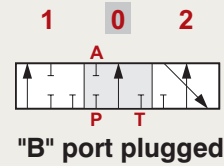
P → **A**

C closed



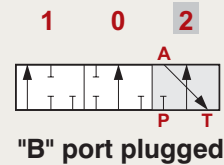
P & T & A closed

C open

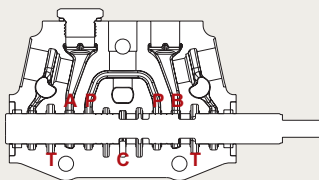


A → **T**

C open



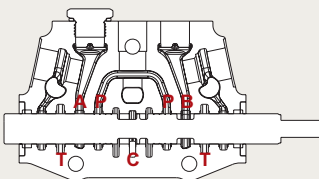
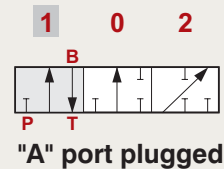
TYPE 4



B → **T**

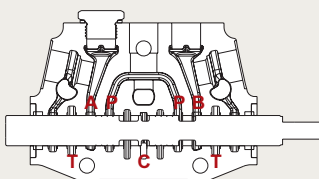
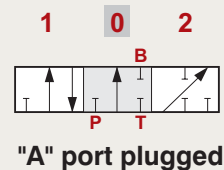
P closed

C open



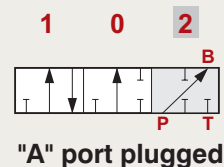
P & T & B closed

C open



P → **B**

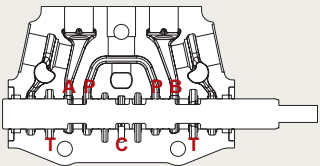
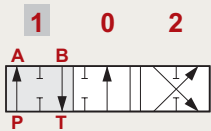
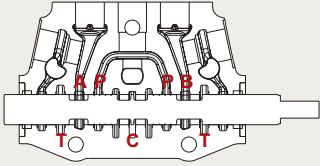
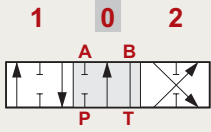
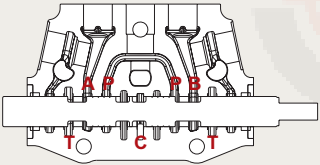
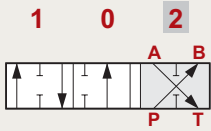
C & T closed



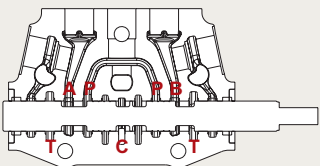
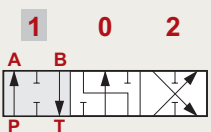
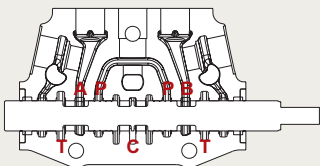
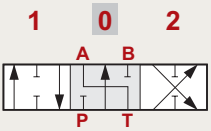
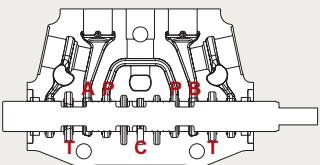
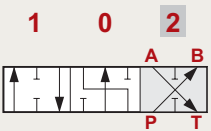
SN-3 spool Options

Sectional Directional Control Valves

TYPE 5

| | | |
|---|--|---|
|  | <p>P → A B → T C closed</p> |  |
|  | <p>B → T P & A closed C open</p> |  |
|  | <p>P → B A → T C closed</p> |  |

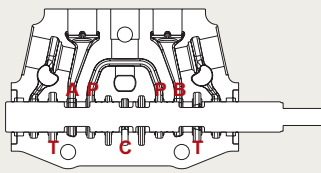
TYPE 6

| | | |
|---|--|---|
|  | <p>P → A B → T C closed</p> |  |
|  | <p>A → T P & B closed C open</p> |  |
|  | <p>P → B A → T C closed</p> |  |

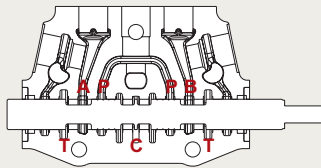
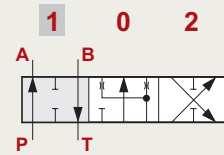
SN-3 Spool Options

Sectional Directional Control Valves

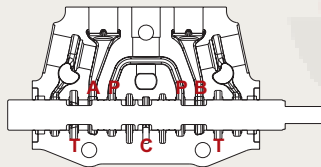
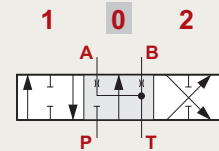
TYPE 2H



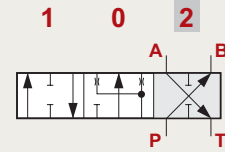
P → **A**
B → **T**
C closed



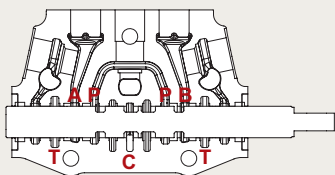
A & B → **T**
P closed
C open



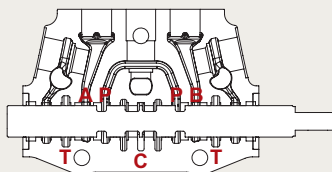
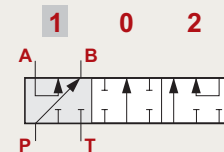
P → **B**
A → **T**
C closed



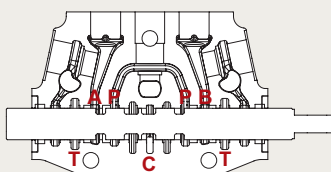
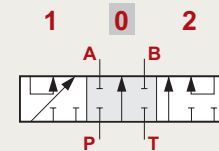
TYPE 1S



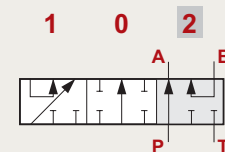
P → **B**
A → **C**



P & T & A & B closed
C open

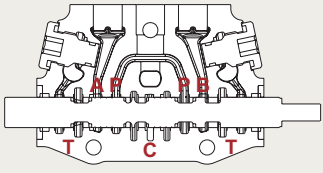
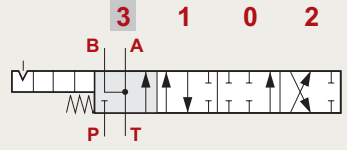
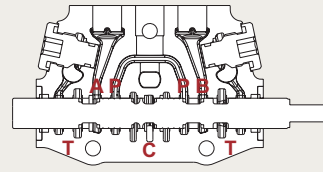
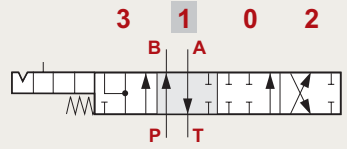
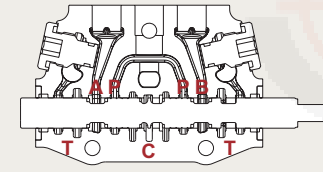
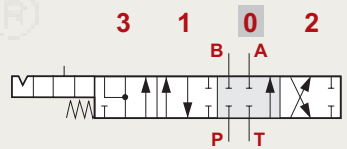
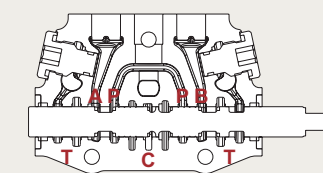
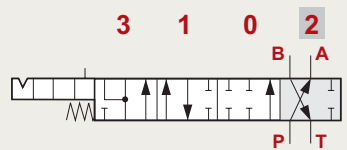


P → **A**
B → **C**



SN-3 spool Options

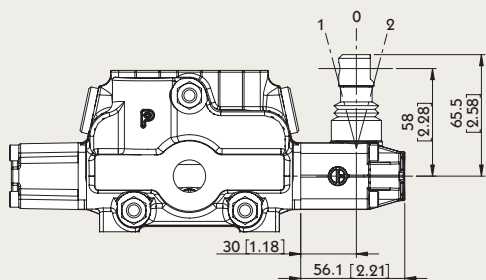
Sectional Directional Control Valves

| TYPE 5PY | NOTE: WITH SPECIAL BODY AND SPECIAL POSITIONER | |
|---|---|---|
|  | <p>A & B → T</p> <p>P closed</p> <p>C open</p> |  |
|  | <p>P → A</p> <p>B → T</p> <p>C closed</p> |  |
|  | <p>P & A & B & T closed</p> <p>C open</p> |  |
|  | <p>P → B</p> <p>A → T</p> <p>C closed</p> |  |

SN-3 A Side

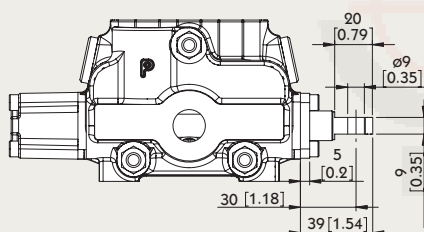
Sectional Directional Control Valves

Type L



Type L:
STANDART LEVER KIT

Type SLP

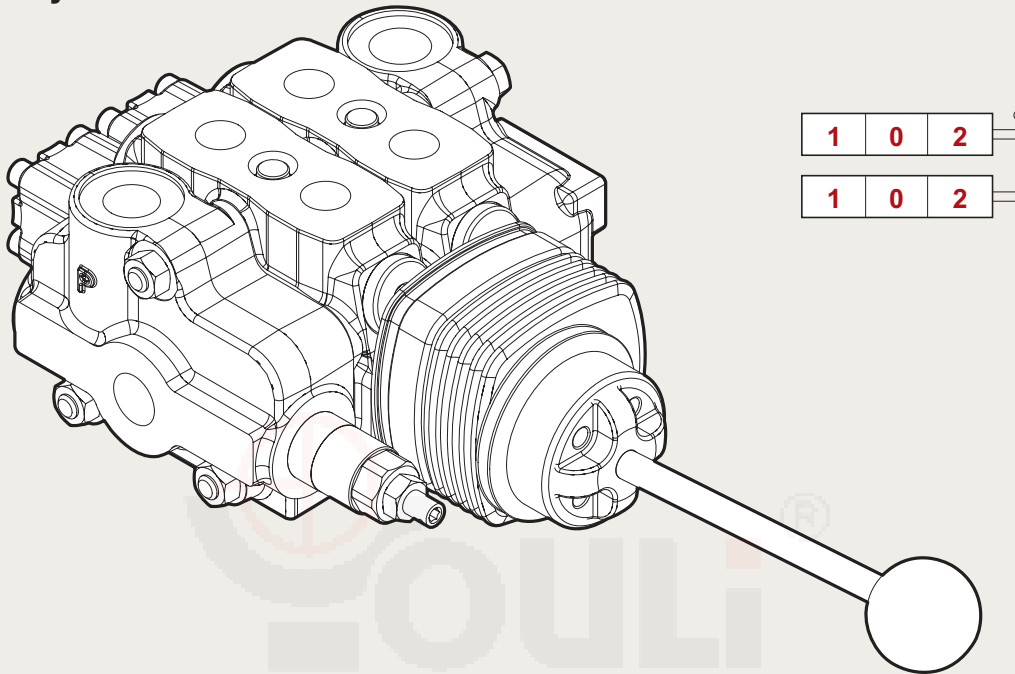


Type SLP:
WITH DUST-PROOF PLATE

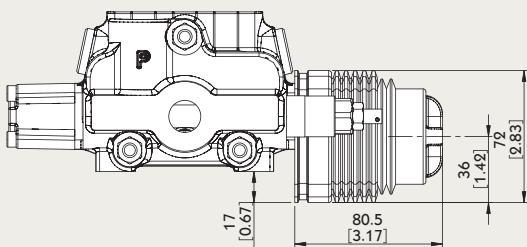
SN-3 A Side

Sectional Directional Control Valves

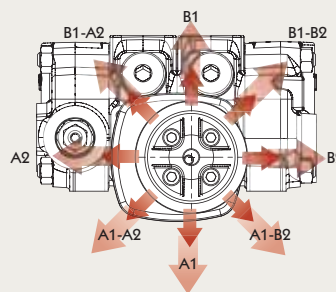
LCB: Joystick control



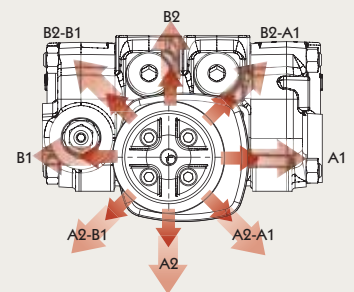
Type LCB



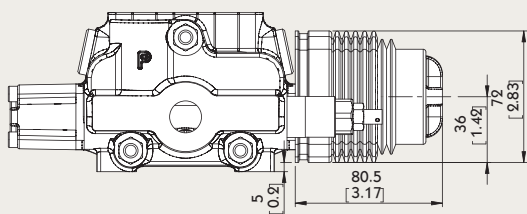
LCB1



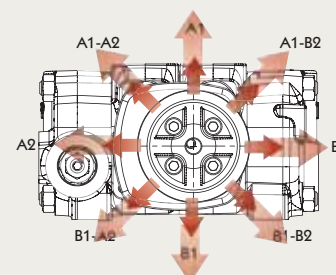
LCB2



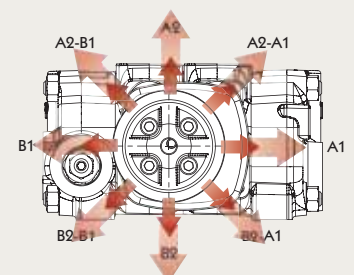
Type LCB



LCB3



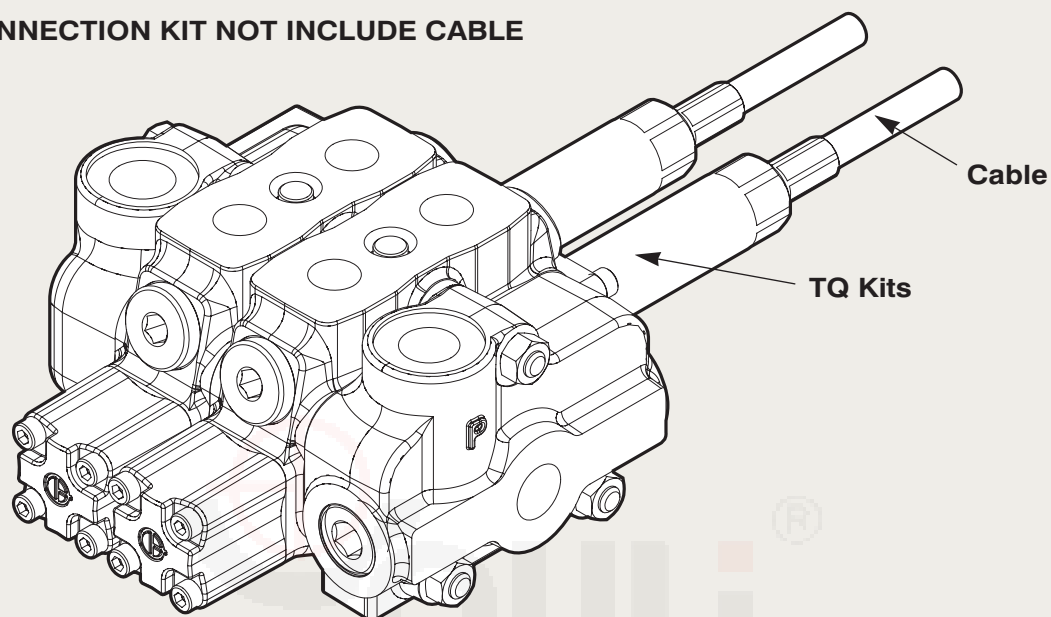
LCB4



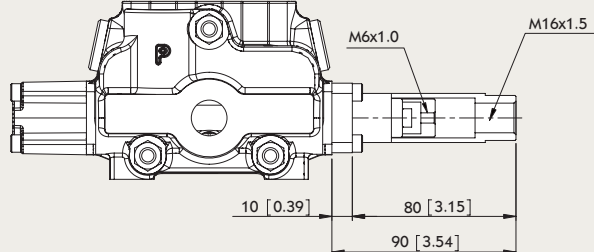
SN-3 A Side

Sectional Directional Control Valves

Note : CONNECTION KIT NOT INCLUDE CABLE



Type TQ

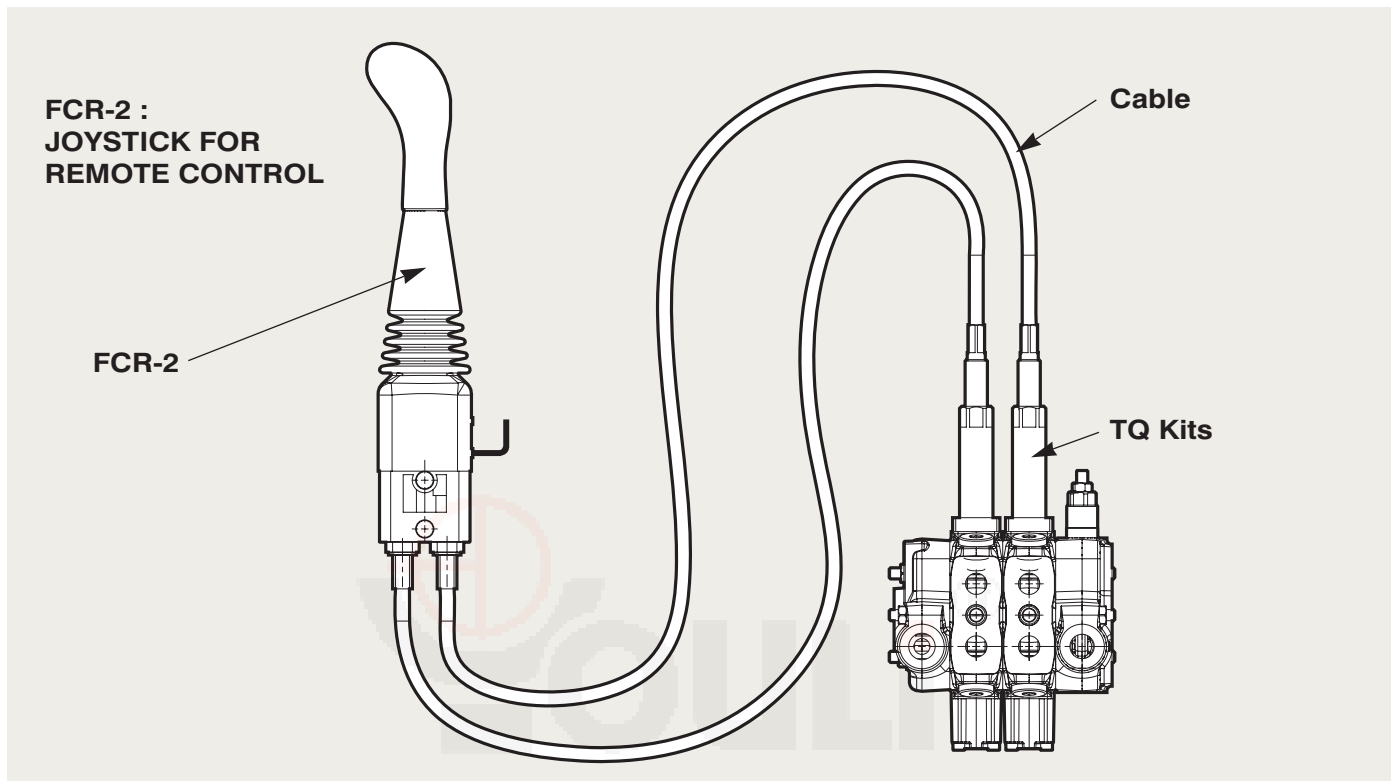


TQ Kit:

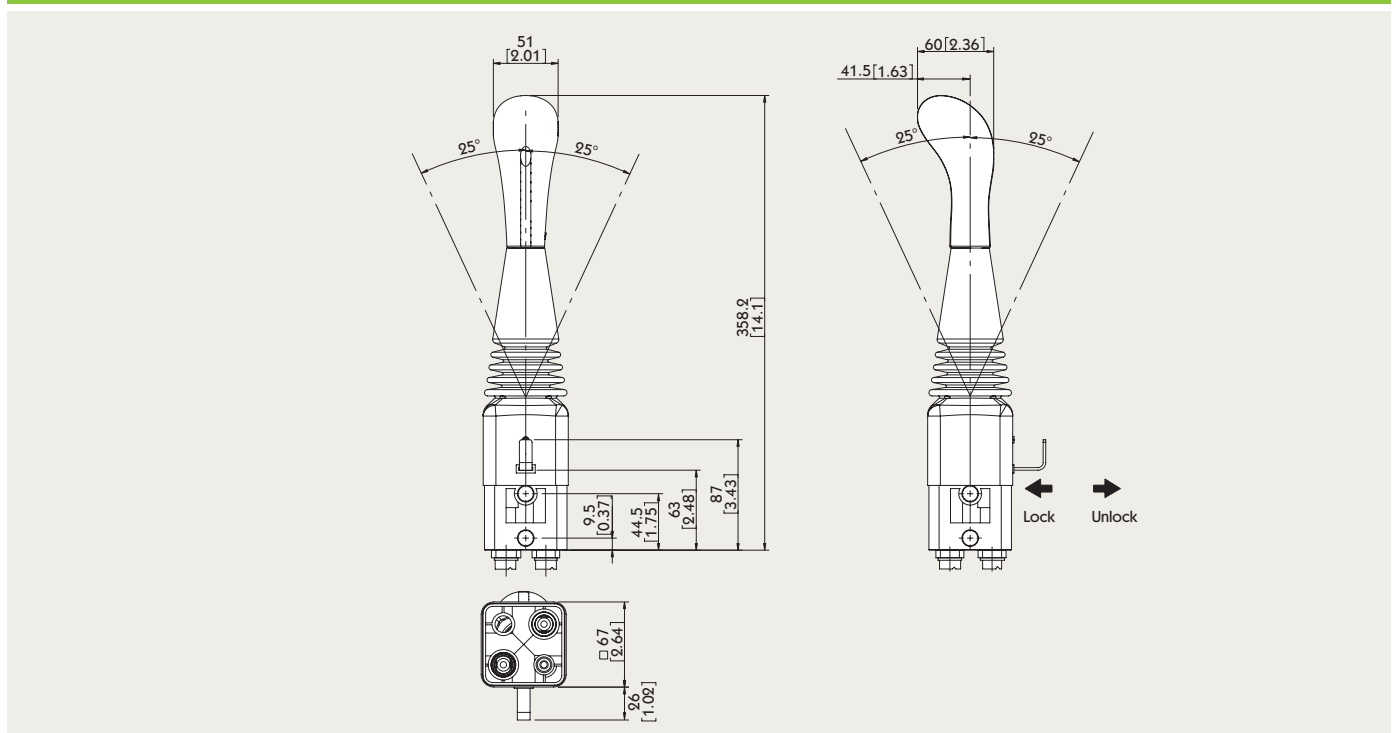


SN-3 A Side

Sectional Directional Control Valves



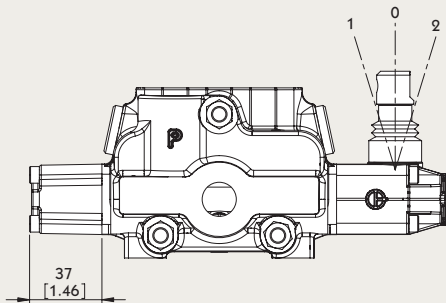
Type FCR-2



SN-3 B Side

Sectional Directional Control Valves

Type 6



6-1 Kit:

DETENT IN POS. 1-0-2, WITHOUT SPRING CENTERED



6-2 Kit:

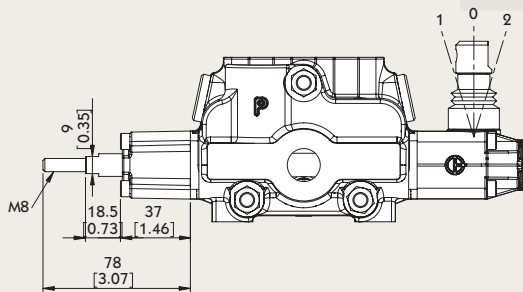
2 POSITIONS, DETENT IN POS. 0-2, WITHOUT SPRING CENTERED



6-3 Kit:

2 POSITIONS, DETENT IN POS. 1-0, WITHOUT SPRING CENTERED

Type 8D2



8D2 Kit:

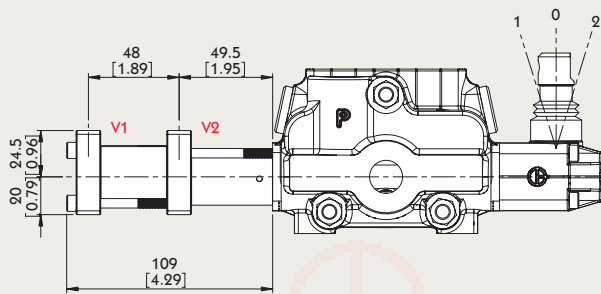
WITH SPRING RETURN TO NEUTRAL POSITION AND PIN WITH M8 MALE THREAD FOR DUAL CONTROL

SN-3 B Side

Sectional Directional Control Valves

Type 8P

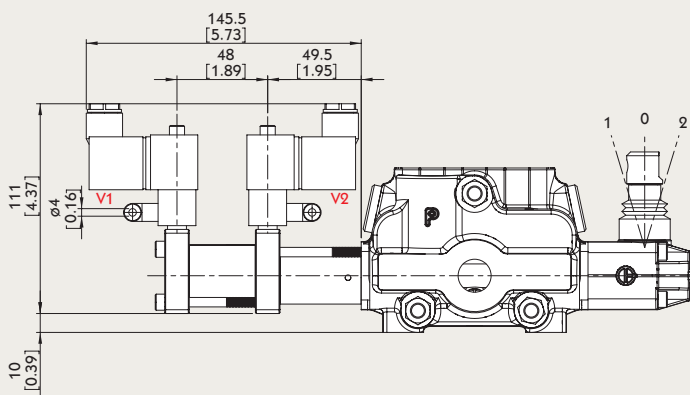
V1 & V2 : NPT 1/8 - 27



Pilot pressure : FROM 7 TO 10 BAR / 101 TO 145 PSI

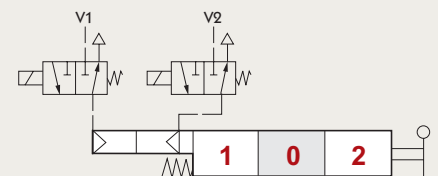


Type 8EP3



Solenoid operating features :

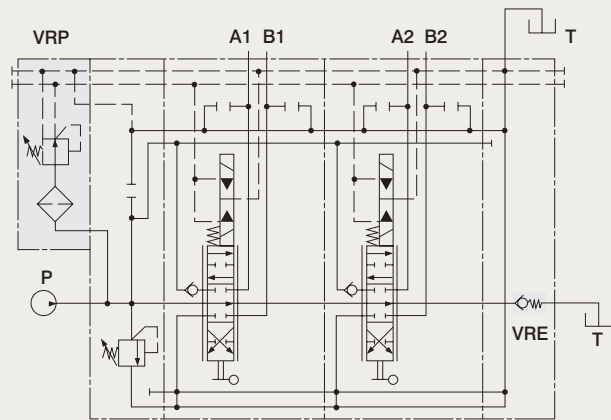
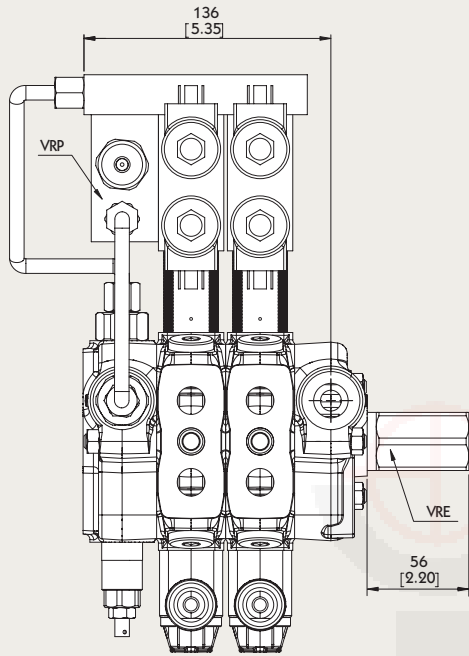
NOMINAL VOLTAGE: 24VDC
 NOMINAL VOLTAGE TOLERANCE: $\pm 10\%$
 POWER RATING: 5W



SN-3 B Side

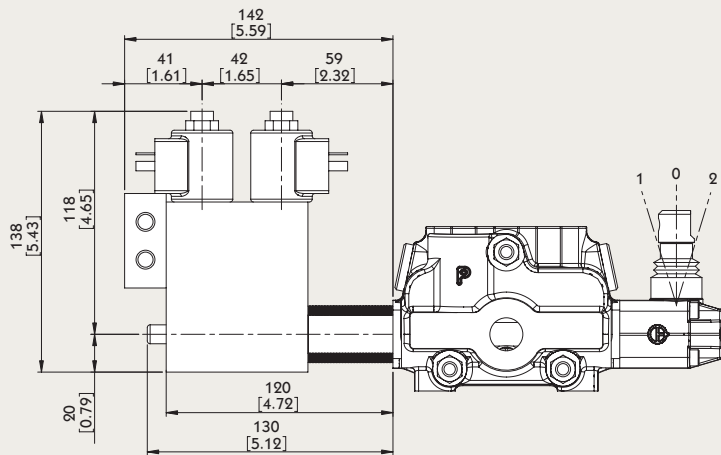
Sectional Directional Control Valves

Type 8ED3



VRP valve operating features :

- OUTLET PRESSURE: 25 BAR / 363 PSI
- MAX. FLOW: 8 L/MIN / 2.1 US GPM
- FLTERING: 80 μ

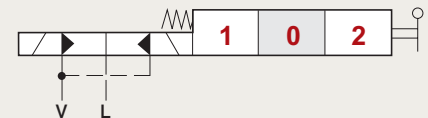


Operating features :

- PILOT PRESSURE:
 - MIN. 10 BAR / 145 PSI
 - MAX. 50 BAR / 725 PSI
- MAX. BACKPRESSURE ON DRAIN L: 25 BAR / 360PSI

Solenoid operating features :

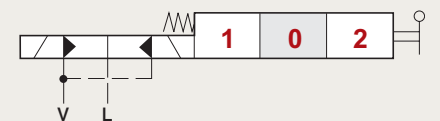
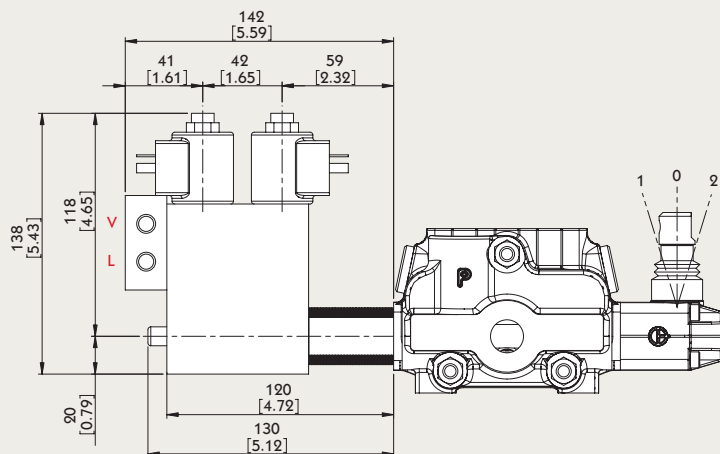
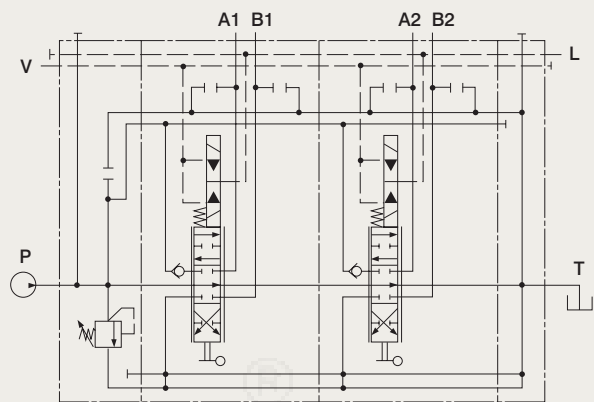
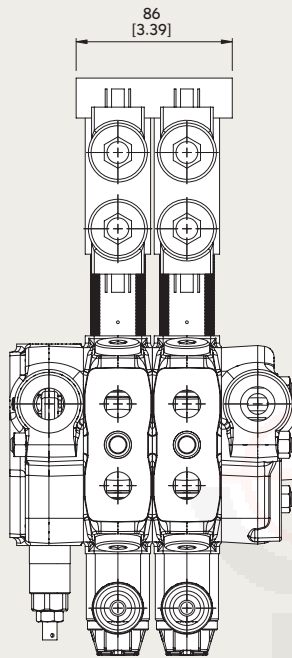
- NOMINAL VOLTAGE: 12VDC / 24 VDC
- POWER RATING: 21 W
- DUTY CYCLE: 100 %



SN-3 B Side

Sectional Directional Control Valves

Type 8ER3



Operating features :

- PILOT PRESSURE:
- MIN. 10 BAR / 145 PSI
 - MAX. 50 BAR / 725 PSI
- MAX. BACKPRESSURE ON DRAIN L: 25 BAR / 360PSI

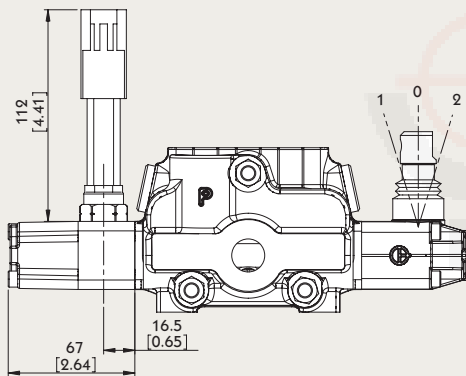
Solenoid operating features :

- NOMINAL VOLTAGE: 12VDC / 24 VDC
- POWER RATING: 21 W
- DUTY CYCLE: 100 %

SN-3 B Side

Sectional Directional Control Valves

Type 8MG



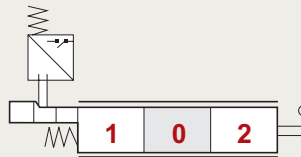
MICROSWITCH

Operating features :

MECHANICAL LIFE: • 5X10⁶ OPERATIONS

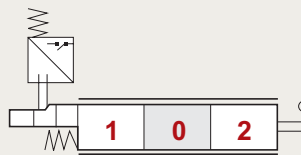
ELECTRICAL LIFE (RESISTIVE LOAD):

- 10⁶ OPERATIONS - 7A / 13.5 VDC
- 5x10⁴ OPERATIONS - 10A / 12 VDC
- 5x10⁴ OPERATIONS - 3A / 28 VDC



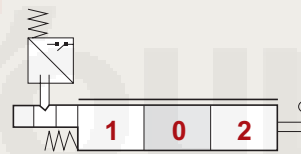
8MG1 Kit:

MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1



8MG2 Kit:

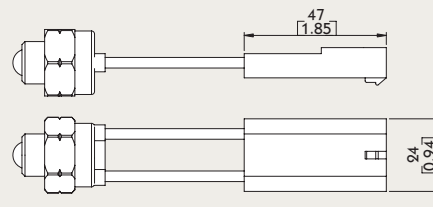
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 2



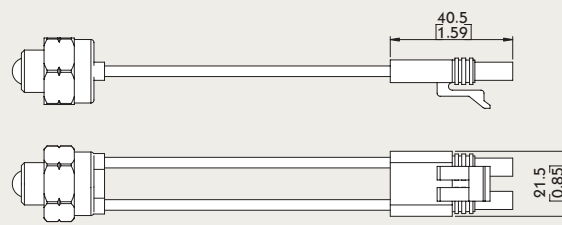
8MG3 Kit:

MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1 AND POS. 2

With NO contact (female connector with male end)



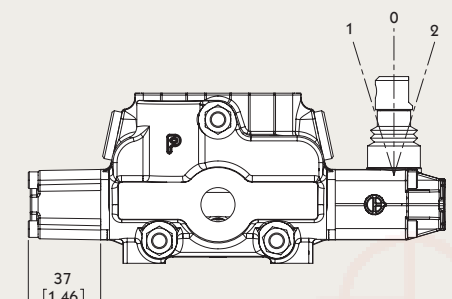
With NC contact (male connector with female end)






SN-3 B Side

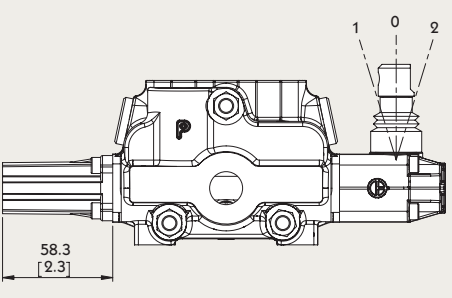
Sectional Directional Control Valves




Type 8



| | |
|--|---|
|  | <p>8 Kit: SPRING RETURN TO NEUTRAL POSITION</p> |
|  | <p>8-1 Kit: SPRING RETURN TO NEUTRAL POSITION. (2 POSITIONS)</p> |
|  | <p>8-2 Kit: SPRING RETURN TO NEUTRAL POSITION. (2 POSITIONS)</p> |

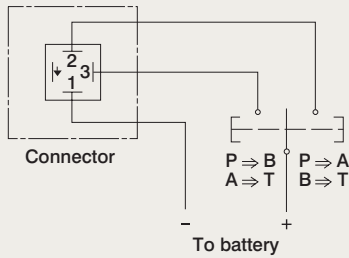
Type 9



| | |
|--|---|
|  | <p>9-1 Kit: DETENT IN POS. 1, 2 WITH SPRING CENTERED</p> |
|  | <p>9-2 Kit: DETENT IN POS. 2 WITH SPRING CENTERED</p> |
|  | <p>9-3 Kit: DETENT IN POS. 1 WITH SPRING CENTERED</p> |

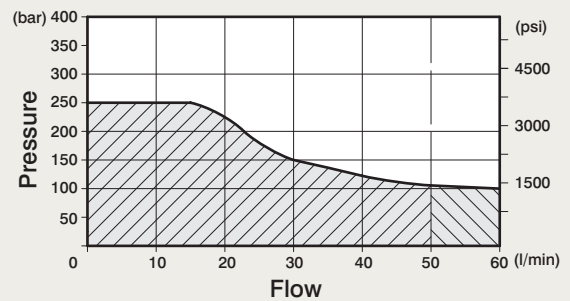
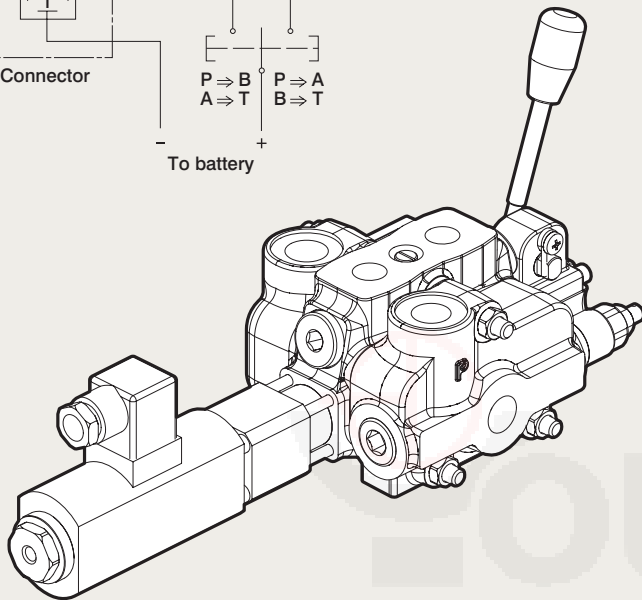
SN-3 B Side (Optional controls) Sectional Directional Control Valves

Electric wiring example



Coil features :

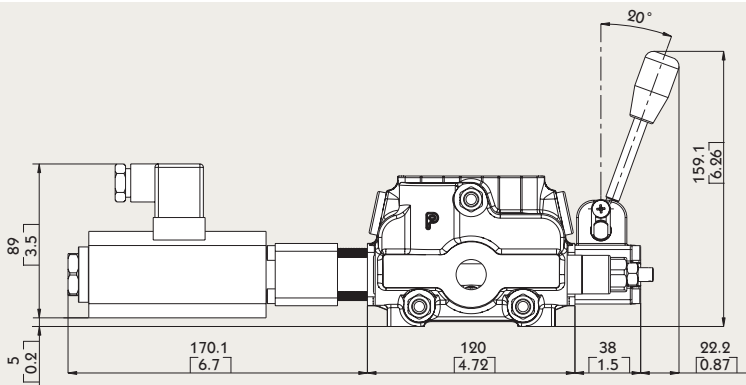
NOMINAL EL. POWER: 60 WATT
LIMITS OF AMBIENT TEMPERATURE : -20°C +70°C
STANDARD VOLTAGE: 12 - 24 VDC (±10%)



| | | | |
|---------------------------|----------------------|---|---------------------------|
| Nominal flow rating | | 50 L/min | 13 US gpm |
| Operating pressure (Max.) | | 250 bar | 3650 psi |
| Back pressure (Max.) | on outlet port T | 5 bar | 70 psi |
| Fluid temperature | with NBR seals | -20°C~80°C | -4°F~176°F |
| | with FPM seals | -20°C~100°C | -4°F~212°F |
| Viscosity | Operating range | 15mm ² /s~75mm ² /s | 15~75 cst |
| | Max. | 400mm ² /s | 400 cst |
| | Min. | 12mm ² /s | 12 cst |
| Ambient temperature | | -40°C~60°C | -40°F~140°F |
| Internal Leakage A(B)->T | Δ P = 100bar at 40°C | 10 cm ³ /min | 0.61 in ³ /min |

Available sections from 1 to 3 section

Type 8ESN



8ESNLES Kit:

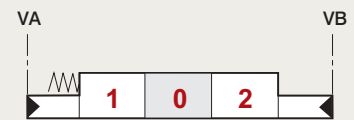
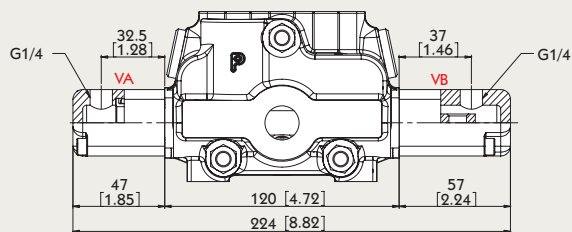


8ESNCAE Kit:



SN-3 B Side (Optional controls) Sectional Directional Control Valves

Type 8IM



Operating features :

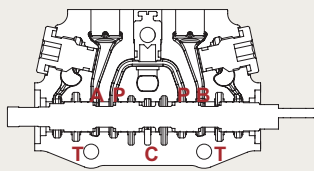
PILOT PRESSURE : MAX. 50 BAR

INTERNAL LEAKAGE A(B) -> T : MAX. 6 CM³/MIN
(100 BAR / 40°C)

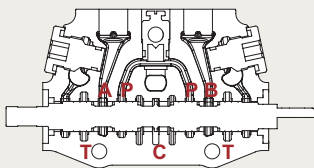
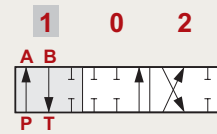
SN-3 Special spool (Options for 8ESN Kit)

Sectional Directional Control Valves

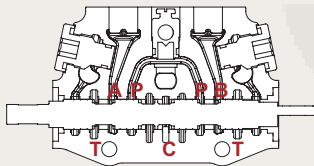
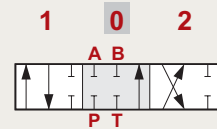
Type 8ESN#1 (CODE: YLWSN32001-8ESN)



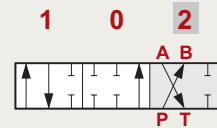
P → A
 B → T
 C closed



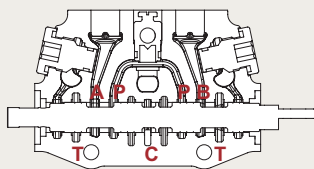
A & B & P & T closed
 C open



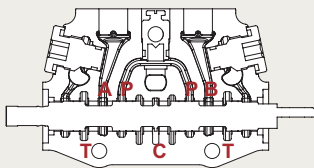
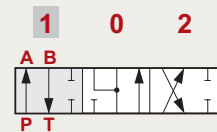
P → B
 A → T
 C closed



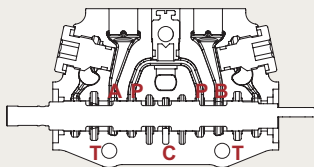
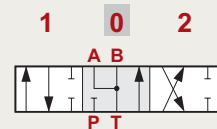
Type 8ESN#2 (CODE: YLWSN32002-8ESN)



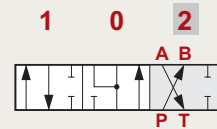
P → A
 B → T
 C closed



A & B → T
 P closed
 C open



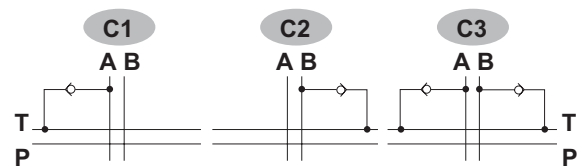
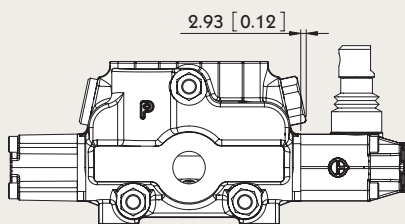
P → B
 A → T
 C closed



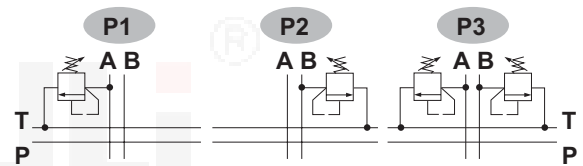
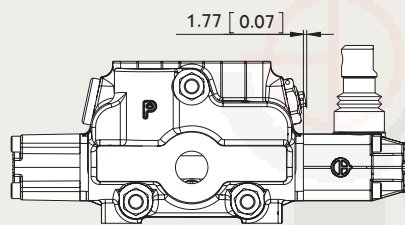
SN-3 Port Relief

Sectional Directional Control Valves

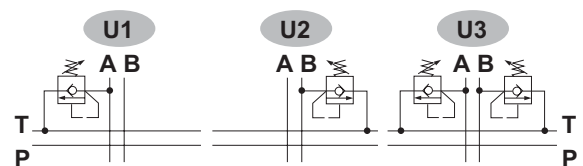
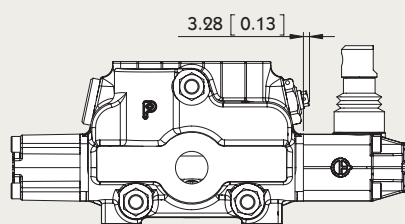
TYPE C



TYPE P



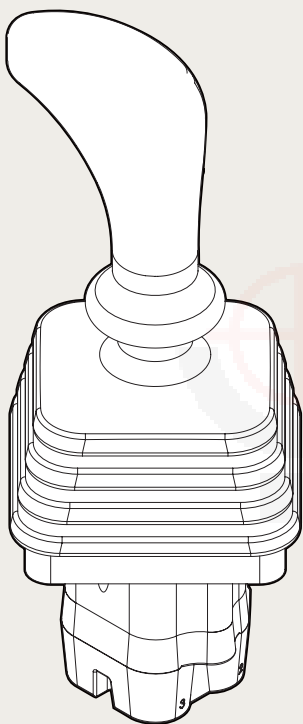
TYPE U



SN-3 Accessories

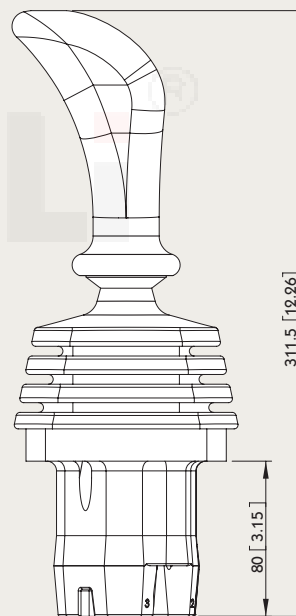
Sectional Directional Control Valves

Type JHP-2

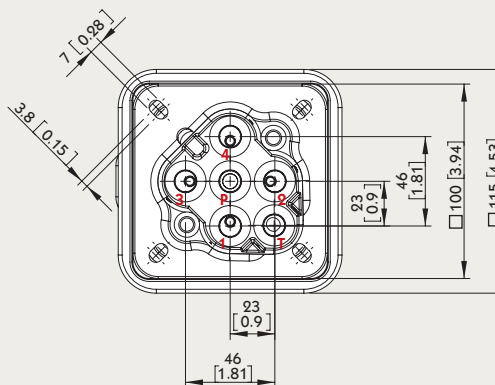
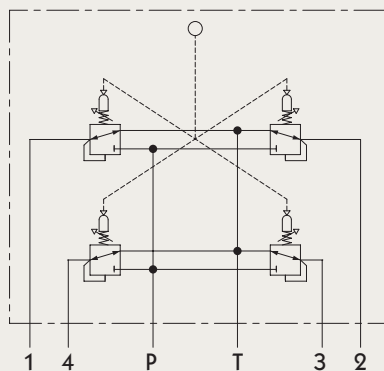


Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm²/s (cSt) viscosity at 40 °C (104 °F)
- Flow : 5 ~ 20 LPM
- Feeding pressure : 30 ~ 100 bar
- Max. backpressure : 3 bar
- Internal leakage at 30 bar : 10 ~ 18 cm³/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80 °C
- Ambient temperature : - 40 ~ 60 °C



HYDRAULIC SCHEME:



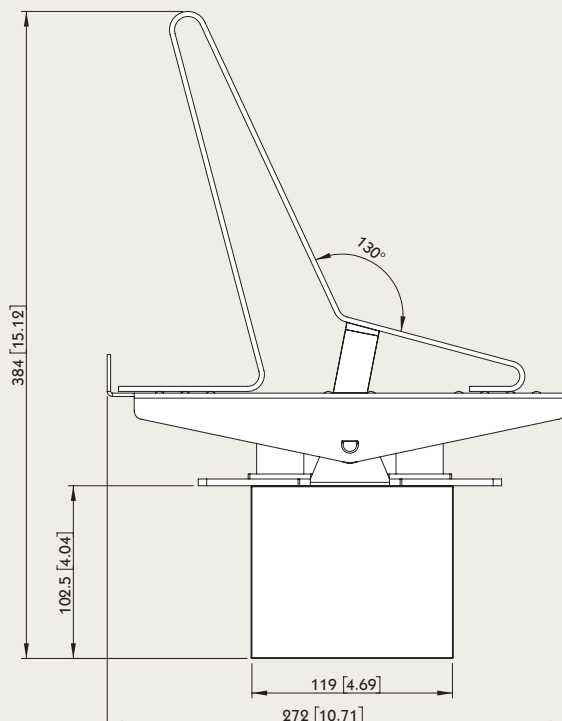
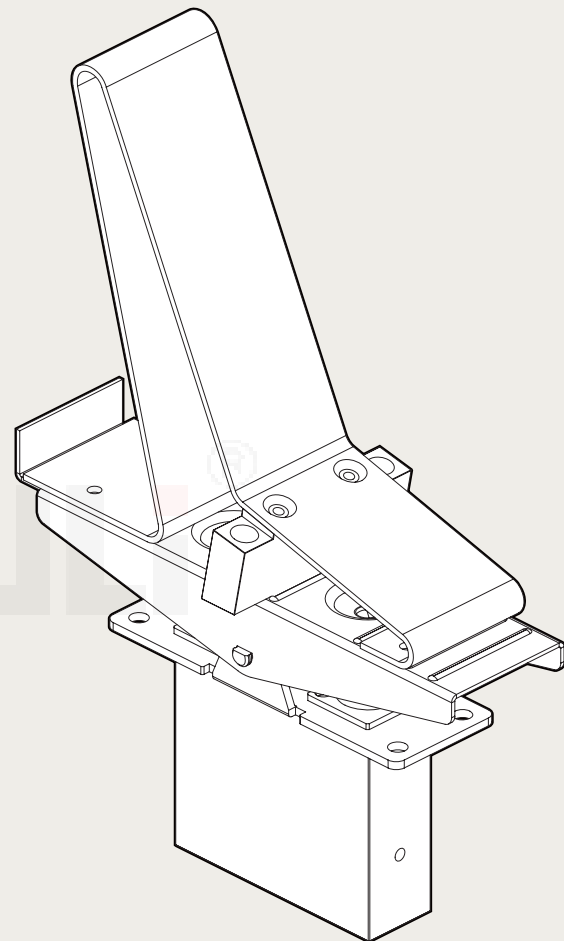
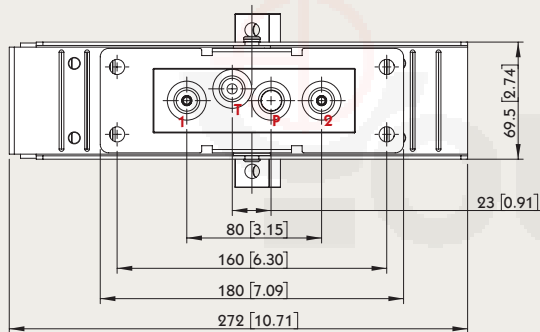
SN-3 Accessories

Sectional Directional Control Valves

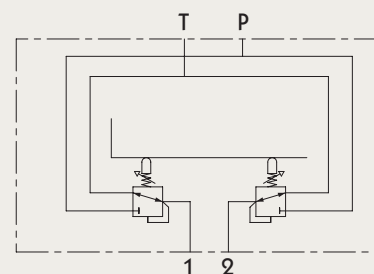
Type PHP-1

Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm²/s (cSt) viscosity at 40 °C (104 °F)
- Flow : 5 ~ 20 LPM
- Feeding pressure : 30 ~ 100 bar
- Max. backpressure : 3 bar
- Internal leakage at 30 bar : 10 ~ 18 cm³/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80 °C
- Ambient temperature : - 40 ~ 60 °C



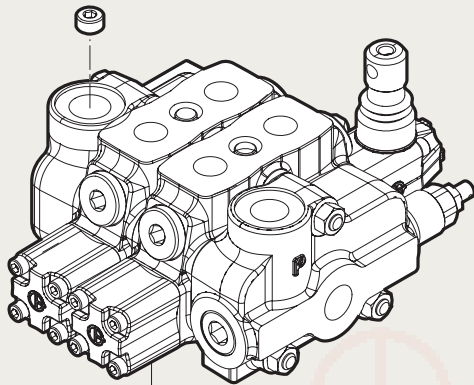
HYDRAULIC SCHEME:



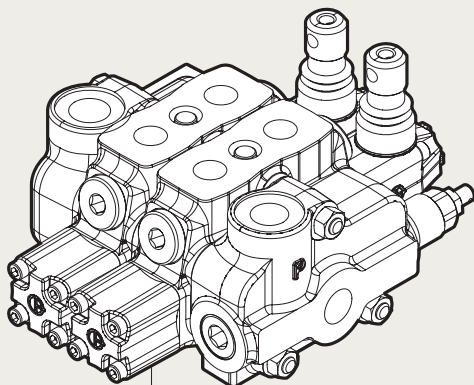
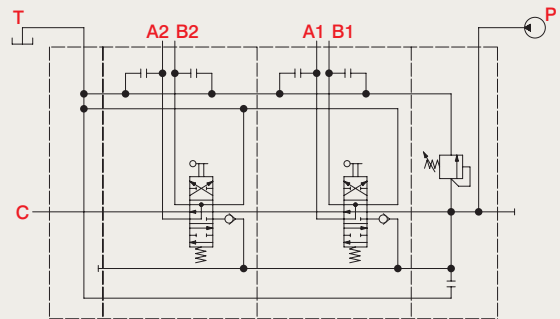
SN-3 Outlet

Sectional Directional Control Valves

Power Beyond Conversion plug
(Closed center plug)



M8



M3

